SECTION 01016

SAFETY REQUIREMENTS AND PROTECTION OF PROPERTY

PART 1 - GENERAL

1.01 CONTRACTOR'S RESPONSIBILITY FOR SAFETY

Conduct whatever work is necessary for safety and be solely and completely responsible for conditions of the job site, including safety of all persons (including employees) and property during the construction of the project. This requirement shall apply continuously and not be limited to normal working hours.

1.02 FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS

- A. Safety provisions shall conform to the Federal and State Departments of Labor Occupational Safety and Health Act (OSHA), and all other applicable Federal, State, County, and local laws, ordinances, codes, the requirements set forth herein, and any regulations that may be specified in other parts of these specifications. Where any of these are in conflict, the more stringent requirements shall prevail. Contractor's failure to thoroughly familiarize himself with the aforementioned safety provisions shall not relieve him from compliance with the obligations and penalties set forth therein.
- B. All open excavations made in the earth shall be performed in compliance with the State of Florida Trench Safety Act, OSHA 29 CFR 1926.650, Subpart P (Chapter 90-96, Laws of Florida). The Contractor shall appoint a "competent person", in accordance with Subpart P, who shall be present at the jobsite. A "competent person" shall mean one who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.
- C. The Contractor shall familiarize himself with the "Underground Facility Damage Prevention and Safety Act", Florida Statute 556. The Contractor shall contact the Sunshine State One-Call Center, at 1-800-432-4770, forty-eight hours prior to <u>any</u> excavation. Failure to familiarize himself with the aforementioned safety provisions shall not relieve him from compliance with the obligations and penalties set forth therein.
- D. Conduct operations in such a manner utilizing warning devices, such as traffic cones, barricades and warning lights that traffic, pedestrian and Department personnel are given adequate warning of hazards of the worksite as may be deemed necessary by the Department, Engineer of Record, governing agency having jurisdiction over the work or political subdivision.

1.03 SAFE ACCESS BY FEDERAL, STATE, AND LOCAL GOVERNMENT OFFICIALS

The Contractor shall at all times provide proper facilities for safe access to the work by authorized government officials.

01016 - 1 R-1

1.04 CONSTRUCTION SAFETY PROGRAM

A. Develop and maintain for the duration of this project, a safety program that will effectively incorporate and implement all required safety provisions. The Contractor shall appoint an employee who is qualified and authorized to supervise and enforce compliance with the safety program.

- B. Certain products specified in these specifications contain warnings by the manufacturers that under certain conditions, if instructions for use are not followed, a hazardous condition may exist. It is the Contractor's responsibility to instruct his workmen in the safe use of the product, or any product substitution.
- C. The duty of the Engineer of Record to conduct construction review of the Contractor's performance is not intended to include a review or approval of the adequacy of the Contractor's safety supervisor, the safety program, or any safety measures taken in, on, or near the construction site.

1.05 SAFETY EQUIPMENT

- A. As part of the safety program, maintain at office or other well-known place at the jobsite, safety equipment applicable to the work as prescribed by the governing safety authorities, all articles necessary for giving first-aid to the injured, and establish the procedure for the immediate relocation to a hospital or a doctor's care of any person who may be injured on the jobsite.
- B. Perform all necessary work to protect the general public from hazards, including, but not limited to, surface irregularities or unramped grade changes in pedestrian walkway or sidewalk, and trenches or excavations in roadway. Furnish barricades, lanterns, and proper signs to safeguard the public and work.
- C. The performance of all work and all completed construction, particularly with respect to ladders, platforms, structure openings, scaffolding, fall protection devices, shoring, logging, machinery guards and the like, shall be in accordance with the applicable governing safety authorities.
- D. During construction, construct and at all times maintain satisfactory and substantial temporary chain link fencing, solid fencing, railings, barricades or steel plates, as applicable, at all openings, obstructions, or other hazards in streets and walkways. All such barriers shall have adequate warning lights as necessary, or required, for safety.

1.06 STORAGE OF HAZARDOUS MATERIALS

- A. The Contractor is hereby cautioned that he cannot store any environmentally hazardous materials such as solvents, greases, lubricants or any other type of chemical substances at the project site. The Contractor shall be allowed to keep such materials at the site which is to be used for immediate use only.
- B. The materials shall be stored and handled in a proper and safe manner and upon its use immediately dispose of the containers, cans, rags and remnants of the materials in a manner approved by the Department of Environmental Resources Management (DERM) at the

01016 - 2 R-1

Contractor's own cost. The Contractor can not store empty containers at the site. In case of any violation, the Department will report such violation to DERM and the Contractor shall be subject to all the penalties and fines as required by State and County regulations.

1.07 NOT USED

1.08 TRAFFIC SAFETY AND ACCESS TO PROPERTY

- A. Comply with all rules and regulations of the city, state, and county authorities regarding closing or restricting the use of public streets or highways. No public or private road shall be closed, except by express permission of the Department. Conduct the work so as to assure the least possible obstruction to traffic and normal commercial pursuits. Protect all obstructions within traveled roadways by installing approved barricades, signs, and lights where necessary for the safety of the public. The convenience of the general public and residents and the protection of persons and property are of prime importance and shall be provided for in an adequate and satisfactory manner.
- B. Where traffic will pass over backfilled trenches before they are paved, the top of the trench shall be maintained in a condition that will allow normal vehicular traffic to pass over. Temporary access driveways must be provided where required. Cleanup operations shall follow immediately behind backfilling and the worksite shall be kept in an orderly condition at all times.
- C. When flagmen and guards are required by regulation or when deemed necessary for safety, they shall be furnished with approved orange wearing apparel and other regulation traffic control devices.

1.09 FIRE PREVENTION AND PROTECTION

- A. Perform all work in fire-safe manner. Furnish and maintain on the site adequate fire-fighting equipment capable of extinguishing incipient fires. Comply with applicable federal, local, and state fire-prevention regulations. Where these regulations do not apply, applicable parts of the National Fire Prevention Standard for Safeguarding Building Construction Operations (NFPA No. 241) shall be followed.
- B. The Contractor shall have a Hot Work Permit Program and shall complete a permit prior to cutting or welding. A Fire Watch shall be designated to help monitor the hot work operation.

1.10 TRAFFIC CONTROL AND USE OF PUBLIC STREETS

- A. The Contractor shall be responsible for traffic control as specified hereinafter. Any reference to Miami-Dade County, its departments, or its published regulations, permits and data, shall be synonymous and interchangeable with other recognized governing bodies over particular areas of streets or their departments, published regulations, permits, or data. Abide by all applicable laws, regulations and codes thereof, pertaining to maintenance of public streets, detour of traffic, traffic control and other provisions as may be required for this project.
- B. The Contractor shall be fully responsible for the maintenance of public streets, detour of traffic

01016 - 3 R-1

(including furnishing and maintaining regulatory and informative signs along the detour route), traffic control and other provisions, throughout the project as required by the Metropolitan Dade County Department of Public Works, Traffic Engineering Division (Traffic Division). Traffic shall be maintained according to corresponding typical traffic control details as outlined in the Dade County Public Works Manual. No street shall be completely blocked nor blocked more than one-half at any time, keeping the other half open for traffic without specific approval.

- C. If required by the Traffic Division, employ the required number of uniformed off-duty policemen to maintain and regulate the flow of traffic through the construction area. The number of men required and the number of hours on duty necessary for the maintenance and regulation of the traffic flow shall be subject to their approval. If required for traffic control permits or agencies, the Contractor shall work odd or night hours, as required for traffic control reasons, and the cost of such work shall be considered as incidental to construction.
- D. The Contractor shall provide all barricades and/or flashing warning lights necessary to warn motorist of the construction throughout the project.
- E. Excavated or other material stored adjacent to or partially upon a roadway pavement shall be adequately marked for traffic safety at all times. Provide necessary access to all adjacent property during construction.
- F. The contractor shall be responsible for the provision, installation and maintenance of all traffic control and safety devices, in accordance with specifications outlined in the Dade County Public Works Manual. In addition, provide for the resetting of all traffic control and information signing removed during the construction period.
- G. Where excavations are to be made in the vicinity of signalized intersections, attention is directed to the fact that vehicle loop detectors may have been embedded in the pavement. Verify these locations by inspecting the site of the work and by contacting the Sunshine State One-Call Center at 1-800-432-4770. Any loop detector which is damaged, whether shown on the Plans or not, shall be repaired or replaced to the satisfaction of the Traffic Division.
- H. Notify the Traffic Division 24 hours in advance of the construction date, and 48 hours in advance of construction within any signalized intersection.
- I. Temporary pavement will be required over all cuts in pavement areas, and also where traffic is to be routed over swale or median areas. When the temporary pavement for routing traffic is no longer necessary, it shall be removed and the swale or median area restored to their previous condition.

1.11 CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTIES AND SERVICE

- A. Where the Contractor's operation could cause damage or inconvenience to railway, telephone, fiber optic, television, electrical power, oil, gas, water, sewer, or irrigation systems, the Contractor shall make all arrangements necessary for the protection of these utilities and services or any other known utilities.
- B. Notify all utility companies that are affected by the construction operation at least 48 hours in advance. Under no circumstance expose any utility without first obtaining permission from the

01016 - 4 R-1

appropriate agency. Once permission has been granted, locate, expose, and provide temporary support for all existing underground utilities and utility poles where necessary.

- C. The Contractor and his subcontractors shall be solely and directly responsible to the owner and operators of such properties for any damage, injury, expense, loss, inconvenience, delay, suits, actions, or claims of any character brought because of any injuries or damage which may result from the construction operations under this project.
- D. Neither the Department nor its officers or agents shall be responsible to the Contractor for damages as a result of the Contractor's failure to protect utilities encountered in the work.
- E. In the event of interruption to domestic water, sewer, storm drain, or other utility services as a result of accidental breakage due to construction operations, promptly notify the proper authority. Cooperate with said authority in restoration of service as promptly as possible and bear all costs of repair. In no event shall interruption of any utility service be allowed outside working hours unless granted by the owner of the utility.
- F. In the event water service lines that interfere with trenching are encountered, the Contractor may, by obtaining prior approval of the water utility, cut the service, dig through, and restore the service with similar and equal materials at the Contractor's expense and as approved by the Department.
- G. Drainage culverts that are at or near right angles to a pipeline and are removed by the Contractor shall be replaced in kind at the expense of the Contractor unless otherwise noted.
- H. Replace, with material approved by the Department, at Contractor's expense, any and all other laterals, existing utilities or structures removed or damaged during construction, unless otherwise provided for in these specifications and as approved by the Department.

1.12 HURRICANE PREPAREDNESS

A. General

During such periods of time as are designated by the United States Weather Bureau as being a hurricane alert, the Contractor shall perform all precautions as necessary to safeguard the work and property, including the removal of all small equipment and materials from the site, lashing all other equipment and materials to each other and to rigid construction, and any other safety measures as may be directed by the Engineer.

B. Upon Notification of a Hurricane Watch

The Contractor should prepare or have in place a Plan of Action for the specific actions to be taken on their particular projects.

C. Upon Notification of a Hurricane Warning

1) The Contractor shall implement their Plan of Action to protect the project and the public.

01016 - 5 R-1

2) For construction projects within the public right-of-ways, the Contractor shall suspend his construction operations, backfill all open trenches, remove all construction equipment and materials from the right-of-way, remove unnecessary traffic barricades and signs and secure remaining barricades by "half burial" or "double sand bags".

1.13 WORKING IN CONFINED SPACES

Where a Contractor needs to work in a confined space, the Contractor must comply with the General Industry, OSHA Confined Space Standard, CFR 1910.146 or the equivalent Confined Space Standard in DFR 1926, Construction Standards.

PART 2 - PRODUCTS

(Not Used)

PART 3 - EXECUTION

(Not Used)

END OF SECTION

01016 - 6 R-1